

“Pupa, beginning of May. Forms its cocoon by uniting the leaves of its food-plant together with a white silk.

“Imago, end of May.”

Major Roberts sends notes on several species which, owing to their rarity, he has not forwarded to me; of one of these (a small blue butterfly) he sends a pencil sketch; but it would be impossible, either from a rough representation or the short notes which accompany the numbers, to ascertain with any certainty the correct names of the species.

#### EXPLANATION OF PLATE XXXIX.

- Fig. 1. *Epinephele interposita* ♂, Ersch., p. 405.  
 2. *Melitæa robertsi* ♂, Butl., p. 406.  
 3. *Lampides contracta* ♂, Butl., p. 406.  
 4. *Lycæna bracteata* ♂, Butl., p. 407.  
 5. *Chrysophanus stygiannus* ♂, Butl., p. 408.  
 6. *Belenois mesentina*, Cram, pupa, p. 409.  
 7. *Synchlœ iranica*, Bien., pupa, p. 410.  
 8. Hind segments of larva of *Chærocampa cretica*, Boisd., p. 411.  
 9. Hind segments of larva of *Deilephila robertsii*, Butl., p. 412.  
 10. Pupa of *D. robertsii*.  
 11. Pupa of *Eusmerinthus kindermanni*, Lederer, p. 413.  
 12. Front and hind segments of larva of *Eusmerinthus kindermanni*.

#### 8. Further Additions to the Marine Molluscan Fauna of South Australia, with Descriptions of new Species. By GEORGE FRENCH ANGAS, C.M.Z.S., F.L.S., &c.

[Received April 20, 1880.]

(Plate XL.)

Several months ago I received from Professor Ralph Tate, of the Adelaide University, a small collection of marine shells obtained by him (mostly from shell-sand) on various beaches in St. Vincent's and Spencer's gulfs. Amongst these the following species occur which have not hitherto been recorded as having been met with in the Province of South Australia:—

1. PURPURA ANOMALA, Angas, P. Z. S. 1877, p. 34.

The type specimens were dredged outside Port-Jackson Heads, New South Wales.

2. NASSA LABECULA, A. Ad. St. Vincent's Gulf (*Tate*).

3. NASSA LIRELLA, Beck. St. Vincent's Gulf (*Tate*).

4. CLATHURELLA RUFOZONATA, Angas, P. Z. S. 1877, p. 38. Port Jackson.

5. *CLATHURELLA BICOLOR*, Angas, P. Z. S. 1871, p. 18. Port Jackson.

6. *DAPHNELLA FRAGILIS*, Reeve. Aldinga Bay (*Tate*).

7. *RISSOINA CRASSA*, Angas, P. Z. S. 1871, p. 17. Port Jackson.

8. *TORNATINA BRENCHLEYI*, Angas, P. Z. S. 1877, p. 40. Outside Port-Jackson Heads.

9. *LAMELLARIA OPHIONE*, Gray. Moreton Bay and New Zealand. The species described below appear new to science.

10. *CLATHURELLA CRASSINA*, n. sp. (Plate XL. fig. 6.)

Shell stoutly fusiformly turreted, solid, whitish, tinged with chestnut at the base of the aperture; whorls 7, rounded and somewhat flattened above, longitudinally strongly nodulously ribbed, and sculptured transversely with numerous fine thread-like striæ; aperture subovate; outer lip thickened, flattened, and variced externally, dentate within; canal short, slightly recurved; posterior sinus rather broad, above which there is a small chestnut-coloured spot.

Alt.  $4\frac{1}{4}$ , diam. 2 lines.

*Hab.* Aldinga Bay, St. Vincent's Gulf (*Tate*).

11. *GLYPHOSTOMA PAUCIMACULATA*, n. sp. (Plate XL. fig. 7.)

Shell fusiformly turreted, solid, white tinged with brown above the sutures, and with three or four irregular dark-chestnut line-like spots near the periphery of the last whorl and on the columella; whorls 6, with about eight stout somewhat nodulous longitudinal ribs, crossed by smaller transverse ridges that become larger at the back of the outer lip and towards the base; aperture narrowly ovate; outer lip flattened and variced externally, slightly sulcate within; columella with six transverse elevated ribs or ridges; canal a little produced; posterior sinus rather broad and shallow.

Alt. 4, diam.  $1\frac{1}{2}$  lines.

*Hab.* Aldinga and Holdfast Bays (*Tate*).

This curious shell belongs to the late Dr. Gabb's genus *Glyphostoma* (fam. Pleurotomidæ.).

12. *ANAUOPSIS GLOBULUS*, n. sp. (Plate XL. fig. 5.)

Shell rimate, globosely turbinate, rather thin, shining, orange horn-colour, much paler on the last whorl towards the aperture; whorls 4, convex, with two narrow concentric raised keels on the subapical whorl; last whorl very large, nearly smooth, with a few descending lines of growth, crossed here and there with exceedingly fine, delicate, close-set concentric striæ, visible only under the lens; aperture semilunar; outer lip thin, simple, arcuate; columella slightly thickened and expanded over the umbilicus.

Length  $2\frac{1}{2}$ , breadth 2 lines.

*Hab.* Holdfast Bay, in shell-sand.

13. *RISSOINA ELEGANTULA*, n. sp. (Plate XL. fig. 10.)

Shell elongately pyramidal, moderately solid, white; whorls 8, slightly convex, longitudinally closely and regularly finely plicate, the interstices (especially on the last whorl) crossed by fine liræ; sutures distinct; aperture subovate; outer lip thickened, and slightly sinuous at the base of the columella.

Diam. 1, alt. 3 lines.

*Hab.* Aldinga Bay, from shell-sand (*Tate*).

14. *RISSOINA LIRATA*, n. sp. (Plate XL. fig. 11.)

Shell elongately pyramidal, rather thin, dull milky white; whorls 7, a little convex, longitudinally sculptured with regular moderately distant ribs that become obsolete towards the centre of the last whorl, which is crossed between the periphery and the base with numerous very fine, close-set hair-like striæ; outer lip thickened and variced.

Length 2, breadth  $\frac{3}{4}$  of a line.

*Hab.* Holdfast and Aldinga Bays, in shell-sand.

15. *COLLONIA* (?) *ROSEOPUNCTATA*, n. sp. (Plate XL. fig. 8.)

Shell minute, narrowly and deeply umbilicated, globosely turbinated, solid, white, more or less dotted or flamed all over with bright rose-colour; whorls 4, convex, closely concentrically ridged throughout; aperture subcircular; peritreme a little thickened and contracted.

Diam.  $1\frac{1}{2}$ , alt.  $1\frac{1}{2}$  line.

*Hab.* Holdfast Bay, St. Vincent's Gulf; in shell-sand (*Tate*).

Were it not for its umbilicus, this minute shell in its general aspect closely resembles a *Collonia*. If the operculum, when discovered, proves to be calcareous, then its relationship to that genus will be more nearly established.

16. *ADEORBIS VINCENTIANA*, n. sp. (Plate XL. fig. 9.)

Shell depressedly conical, ovate, broadly umbilicated, moderately thin, semipellucid, white; whorls 3, rapidly increasing, the last very large, convex, finely undulately concentrically striated, obtusely keeled below the periphery, and with a basal keel surrounding the umbilical region, which is crossed by somewhat irregular rude lines of growth that become slightly crenate upon the keel; spire small, elevated; apex papillary; aperture semilunar; outer lip arcuate, simple; inner lip nearly straight, sinuously angled posteriorly.

Long. 3, lat.  $2\frac{1}{2}$ , alt.  $1\frac{1}{2}$  line.

*Hab.* Aldinga Bay, St. Vincent's Gulf (*Tate*).

About the same size as *Adeorbis angasi*, A. Ad., from Port Jackson, from which it differs both in form and sculpture.

9. Descriptions of three Species of Marine Shells from Port Darwin, Torres Straits, discovered by Mr. W. T. Bednall; and of a new *Helix* from Kangaroo Island, South Australia. By GEORGE FRENCH ANGAS, C.M.Z.S., F.L.S., &c.

[Received April 20, 1880.]

(Plate XL.)

*VOLUTA (AULICA) BEDNALLI* (Brazier). (Plate XL. fig. 1.)

Shell narrowly elongately ovate, solid, white, with four narrow transverse red or bright orange bands on the last whorl, the upper band close next the suture, the other three at equal distances down the whorl, which are crossed by about twelve similar, narrow, longitudinal, zigzag bands of the same colour, showing a tendency to spread into irregular spots between the second and third transverse bands; whorls 6, flatly convex, marked with fine longitudinal striæ or lines of growth, which are more prominent on the upper whorls; the last whorl more than two thirds the length of the shell; spire elevated, apex papillary and obtuse; aperture somewhat narrow, white within, columella nearly straight, furnished with four plaits, the two upper ones the largest and least oblique, the two lower ones very oblique; outer lip simple.

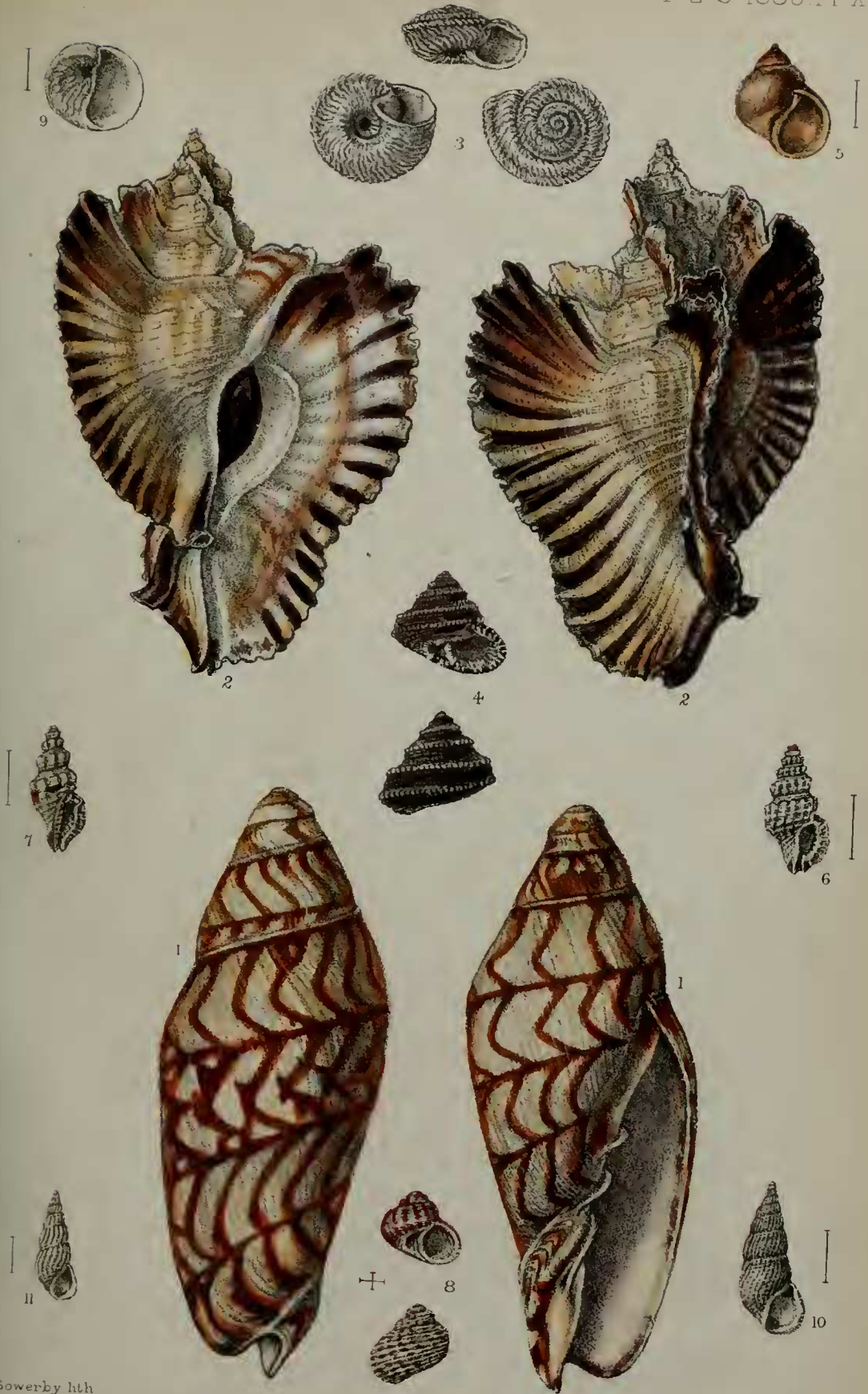
Length 3 inches 4 lines, diam. 1 inch 4 lines.

*Hab.* Port Darwin, Torres Straits, North Australia (*W. T. Bednall*).

This remarkable *Volute* differs from any other known species in its very singular style of painting, which gives it a latticed appearance, the brilliant red, narrow, zigzag descending bands crossing the straight transverse ones at right angles. Mr. Brazier, of Sydney, has already bestowed on this beautiful shell the name of its discoverer, Mr. W. T. Bednall; and I have much pleasure in retaining that name, and figuring it in the Proceedings of the Zoological Society of London.

*MUREX (PTERONOTUS) BEDNALLI* (Brazier). (Plate XL. fig. 2.)

Shell fusiform, rather thin, pale cream-colour, with three very broad, flattened, fin-shaped scabrous varices; whorls 8, sculptured with somewhat distant elevated transverse ridges that spread out and become more developed at the back of the varices, which are striped and tinged with brown, between which are very numerous close-set, fine, hair-like concentric striæ; spire prominent, apex pointed; aperture small, narrowly pyriform; columella slightly arched, smooth, shining, with a brown hollow tooth projecting forward at the base, and another longer one curving outwards and backwards at the junction of the middle varix with the canal; outer lip very broad and flat, with wide flattened grooves towards the outer edge, the interstices



GB Sowerby lth

Hanhart imp

NEW SHELLS FROM PORT DARWIN & SOUTH AUSTRALIA.